

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listing, of claims in the application:

1-25 (Canceled).

26. (Currently amended) A method of manufacturing ~~a wiring in~~ a semiconductor device having a gate electrode comprising the steps of:

forming a film including tungsten by a sputtering method using simple argon gas as a sputtering gas; and

patterning the film to form the gate electrode,

forming a first gate insulating film comprising silicon nitride over the gate electrode;

forming a second gate insulating film over the first gate insulating film; and

forming a semiconductor film over the second gate insulating film,

wherein an amount of sodium contained within the wiring is 0.3 ppm or less.

27. (Previously presented) The method according to claim 26, wherein the sputtering method uses a tungsten target having a purity of 4N or more.

28. (Canceled)

29. (Previously presented) The method according to claim 26, wherein the sputtering method is performed at a substrate temperature of 300 °C or lower.

30. (Previously presented) The method according to claim 26, wherein the sputtering method is performed at a gas pressure from 1.0 Pa to 3.0 Pa.

31. (Currently amended) A method of manufacturing a semiconductor device having a gate electrode comprising the steps of:

forming a film including tungsten by a sputtering method using simple argon gas as a sputtering gas; and

patterning the film to form the gate electrode[[],];

forming a first gate insulating film comprising silicon nitride over the gate electrode;

forming a second gate insulating film over the first gate insulating film;

forming a semiconductor film comprising a channel forming region over the second gate insulating film; and

forming an insulating layer to protect the channel forming region over the channel forming region.

wherein an amount of sodium contained within the gate electrode is 0.3 ppm or less.

32. (Previously presented) The method according to claim 31, wherein the sputtering method uses a tungsten target having a purity of 4N or more.

33. (Canceled)

34. (Previously presented) The method according to claim 31, wherein the sputtering method

is performed at a substrate temperature of 300 °C or lower.

35. (Previously presented) The method according to claim 31, wherein the sputtering method is performed at a gas pressure from 1.0 Pa to 3.0 Pa.

36. (Currently amended) A method of manufacturing a semiconductor device having a gate electrode comprising the steps of:

forming a film including tungsten by a sputtering method using simple argon gas as a sputtering gas;

patterning the film to form a ~~wiring~~ the gate electrode; [[and]]

forming a first gate insulating film comprising silicon nitride over the gate electrode;

forming a second gate insulating film over the first gate insulating film;

forming a semiconductor film over the ~~wiring~~, second gate insulating film; and

crystallizing the semiconductor film.

wherein an amount of sodium contained within the wiring is 0.3 ppm or less.

37. (Previously presented) The method according to claim 36, wherein the sputtering method uses a tungsten target having a purity of 4N or more.

38. (Canceled)

39. (Previously presented) The method according to claim 36, wherein the sputtering method is performed at a substrate temperature of 300 °C or lower.

40. (Previously presented) The method according to claim 36, wherein the sputtering method is performed at a gas pressure from 1.0 Pa to 3.0 Pa.

41. (Currently amended) A method of manufacturing a semiconductor device having a gate electrode comprising the steps of:

forming a film including tungsten by a sputtering method using simple argon gas as a sputtering gas;

patterning the film ~~to form a wiring~~ to form the gate electrode; [[and]]

forming a first gate insulating film comprising silicon nitride over the gate electrode;

forming a second gate insulating film over the first gate insulating film;

forming a semiconductor film over the ~~wiring~~, second gate insulating film; and

crystallizing the semiconductor film.

wherein the crystallized semiconductor film comprises:

a channel forming region;

a first impurity region having a first impurity concentration; and

a second impurity region having a second impurity concentration lower than the first impurity concentration between the channel forming region and the first impurity region, and

wherein an amount of sodium contained within the gate electrode is 0.3 ppm or less.

42. (Previously presented) The method according to claim 41, wherein the sputtering method uses a tungsten target having a purity of 4N or more.

43. (Canceled)

44. (Previously presented) The method according to claim 41, wherein the sputtering method is performed at a substrate temperature of 300 °C or lower.

45. (Previously presented) The method according to claim 41, wherein the sputtering method is performed at a gas pressure from 1.0 Pa to 3.0 Pa.

46. (Previously presented) The method according to claim 26, wherein a stress of the wiring is within a range of from -5×10^{10} to 5×10^{10} dyn/cm².

47. (Previously presented) The method according to claim 31, wherein a stress of the gate electrode is within a range of from -5×10^{10} to 5×10^{10} dyn/cm².

48. (Previously presented) The method according to claim 36, wherein a stress of the wiring is within a range of from -5×10^{10} to 5×10^{10} dyn/cm².

49. (Previously presented) The method according to claim 41, wherein a stress of the gate electrode is within a range of from -5×10^{10} to 5×10^{10} dyn/cm².